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*Admitted only in Maryland
*Admitted only in Virginia
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Federal Agencies

June 21, 2005

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Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Art Unit 2682

Attn: Mail Stop Amendment

Re: U.S. Utility Patent Application
Appl. No. 10/086,367; Filed: March 4, 2002
For: **Method and System for Frequency Up-Conversion**
Inventors: **SORRELLS et al.**
Our Ref: 1744.0020007

Sir:

Transmitted herewith for appropriate action are the following documents:

1. PTO Fee Transmittal Form (PTO/SB/17);
2. Fourth Preliminary Amendment Under 37 C.F.R. § 1.115;
3. One (1) return postcard; and
4. Credit Card Payment Form (PTO-2038) in the amount of \$2,650.00 to cover the excess claims fee.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

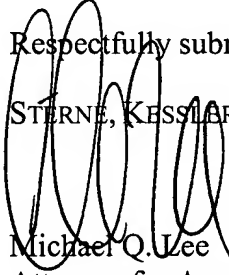
Commissioner for Patents
June 21, 2005
Page 2



The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.


Michael Q. Lee
Attorney for Applicants
Registration No. 35,239

MQL/BWL:apg
Enclosures

412512_1.DOC



Equivalent to Form
PTO/SB/17 (12-04)

Approved for use through 07/31/2006.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)
2,650.00

Complete if Known

Application Number	10/086,367
Filing Date	March 4, 2002
First Named Inventor	David F. SORRELLS
Examiner Name	Pan, Y.
Art Unit	2682
Attorney Docket No.	1744.0020007

METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☒ Deposit Account Deposit Account Number: 19-0036 Deposit Account Name: Sterne, Kessler, Goldstein & Fox P.L.L.C.

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee

☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims	Fee (\$)	Fee Paid (\$)
55	21	50.00	1,050.00			
HP = highest number of total claims paid for, if greater than 20						
Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)			
11	8	200.00	1,600.00			
HP = highest number of independent claims paid for, if greater than 3						

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
- 100 =	/ 50 =	(round up to a whole number) x	=	

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other: _____

SUBMITTED BY		Registration No.	Telephone
Signature		(Attorney/Agent) 35,239	(202) 371-2600
Name (Print/Type)	Michael O. Lee	Date	June 21, 2005

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

412,515

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

SORRELLS *et al.*

Appl. No.: 10/086,367

Filed: March 4, 2002

For: **Method and System for Frequency
Up-Conversion**



Confirmation No.: 3679

Art Unit: 2682

Examiner: Pan, Y.

Atty. Docket: 1744.0020007

Fourth Preliminary Amendment Under 37 C.F.R. § 1.115

Mail Stop Amendment

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

In advance of prosecution, Applicants submit the following amendments and remarks. This Preliminary Amendment is provided in the following format:

- (A) Each section begins on a separate sheet;
- (B) Starting on a separate sheet, amendments to the specification by presenting replacement paragraphs marked up to show changes made;
- (C) Starting on a separate sheet, a complete listing of all of the claims:
 - in ascending order;
 - with status identifiers; and
 - with markings in the currently amended claims; and
- (D) Starting on a separate sheet, the Remarks.

It is not believed that extensions of time or fees for net addition of claims are required beyond those that may otherwise be provided for in documents accompanying this paper. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned

06/23/2005 HALI11 00000026 10086367

01 FC:1202
02 FC:1201

1050.00 OF
1600.00 OF

under 37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 19-0036.